Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Plate Tectonics

Questions for Section 2-3: What Drives the Plates?

1. Be able to define all of the vocabulary words found in your powerpoint. Unless you chose to, you do not have to define them in writing here. I would recommend writing them somewhere at some point.
2. Compare and contrast oceanic and continental crust.
3. How does the density of the rocks in the earth’s crust compare to the density of the rocks in the earth’s mantle? How does this affect their movement?
4. We have never been able to get to a depth that would allow us to directly observe the composition of the earth’s core. Discuss (in a properly composed paragraph) how we know that the density of the earth’s layers vary.
5. Discuss the temperature at the various layers of the earth. How does this affect the layers of rock? Use and define thermal convection in your answer. (You may want to look at the link “The Engine that Drives the Earth to answer this question).
6. To what conclusions did the combined theories of Arthur Holmes and Alfred Wegener lead geologists?
7. We are not sure the exact direction of the current of thermal cells. How might the configuration of island arcs help us determine the direction of thermal cells at the time of the formation of the islands?